### **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/05/02 Date Received: 01/17/02

Project: Metro Self Monitor PO# M67381

Date Extracted: 01/22/02 Date Analyzed: 01/23/02

# RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	Chromium	<u>Copper</u>	<u>Nickel</u>	Zinc
Laboratory ID				
	그림 10 - 일본 12 - 일본 12 - 교본		Alle Affile e	džių, stairos s
M67381	0.67	0.55	0.39	< 0.05
201098-01		lika shika a bira		
Method Blank	< 0.05	<0.05	<0.05	< 0.05

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 02/05/02 Date Received: 01/17/02

Project: Metro Self Monitor PO# M67381

# QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 201098-01 (Duplicate)

					Relative	softe after	
	Rep	orting	Sample	Duplicat	e Percent	Acceptan	ice
Analyte	Ţ	Jnits	Result	Result	Difference	<u>Criteria</u>	<u>a</u>
Chromium	mg/]	L (ppm)	0.67	0.77	14	0-20	all.
Copper	mg/]	L (ppm)	0.55	0.56	2	0-20	
Nickel	mg/l	L (ppm)	0.39	0.54	32 vo	0-20	
Zinc	mg/l	L (ppm)	< 0.05	< 0.05	nm	0-20	
	Chromium Copper Nickel	Analyte U Chromium mg/ Copper mg/ Nickel mg/	Chromium mg/L (ppm) Copper mg/L (ppm) Nickel mg/L (ppm)	Analyte         Units         Result           Chromium         mg/L (ppm)         0.67           Copper         mg/L (ppm)         0.55           Nickel         mg/L (ppm)         0.39	Analyte         Units         Result         Result           Chromium         mg/L (ppm)         0.67         0.77           Copper         mg/L (ppm)         0.55         0.56           Nickel         mg/L (ppm)         0.39         0.54	Reporting Analyte         Sample Units         Duplicate Result         Percent Difference           Chromium Copper Mig/L (ppm)         0.67         0.77         14           Copper Mig/L (ppm)         0.55         0.56         2           Nickel         mg/L (ppm)         0.39         0.54         32 vo	Analyte         Reporting Units         Sample Result         Duplicate Result         Percent Difference         Acceptant Difference           Chromium         mg/L (ppm)         0.67         0.77         14         0-20           Copper         mg/L (ppm)         0.55         0.56         2         0-20           Nickel         mg/L (ppm)         0.39         0.54         32 vo         0-20

Laboratory Code: 201098-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery %	Recovery	Acceptanc	e RPD
Analyte	Units	Level	Result	MS	The second of	MSD	Criteria	(Limit 20)
Chromium	mg/L (ppm)	2	0.67	98		95	80-120	3
Copper	mg/L (ppm)	2	0.55	96		98	80-120	2
Nickel	mg/L (ppm)	4	0.39	94		96	80-120	2
Zinc	mg/L (ppm)	2	< 0.05	99		101	80-120	2

Laboratory Code: Laboratory Control Sample

Duborutory Couc	. Dubblacory Con	cror campic		and a second con-			A CALL TRANSPORT TO THE PARTY OF THE PARTY O	10 to 10 to 10 to
	Reporting	Spike	% Recovery	% Recove	ery A	cceptance	e RPD	
Analyte	Units	Level	LCS	LCSD		Criteria	(Limit 20	))
Chromium	mg/L (ppm)	2	108	104		80-120	4	
Copper	mg/L (ppm)	2	101	94	STATIS.	80-120	7	
Nickel	mg/L (ppm)	4	107	103		80-120	4	
Zinc	mg/L (ppm)	2	105	104		80-120	. 1	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

vo - The value reported fell outside the control limits established for this analyte.

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

February 5, 2002

#### **DUPLICATE COPY**

### INVOICE #02ACU0205-1

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor PO# M67381 - Results of testing requested by Gerry Thompson for material submitted on January 17, 2002.

FEDERAL TAX ID #(b) (6)

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1	201010	I

# SAMPLE CHAIN OF CUSTODY

Mź	1/17/02	AN BI

Send Report To Record Thompson	SAMPLERS (signature)		Page # of TURNAROUND TIME
Company ALASKAN Coppor works	PROJECT NAME/NO.	PO#	□ Standard (2 Weeks) □ RUSH
Address 628 S. Herden 87	METRO SELS morten	M6781	Rush charges authorized by:
City, State, ZIP Stable US 98174	REMARKS		SAMPLE DISPOSAL  Dispose after 30 days Return samples
Phone # 206-782-8779 Fax # 206-782-4708			☐ Will call with instructions

						ANALYSES REQUESTED			 							
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by $8270$	HFS	OR.CL. N.; ZN			Notes	
m67381	-01	1/17	9200	HZO	1							J				
			5													201 201
																$\Box$

Friedman & Bruya, Inc. 3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinguished by	Good Thongson	Alex	1/17/11	9247
Receive Box: All	Michael Endly	F:B	1/17/02	9:47
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#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

February 5, 2002

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on January 17, 2002 from your Metro Self Monitor PO# M67381 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures ACU0205R.DOC